

-31-

## **Nucleic Acid Ladders**

## Abstract

The present invention provides nucleic acid molecules which may be used as standards for estimating the size (in base pairs) and mass of linear, double-stranded or single-stranded nucleic acid molecules separated by size. The nucleic acid molecules of the invention may be DNA molecules, RNA molecules or DNA/RNA hybrid molecules, and may be double-stranded or single-stranded. The invention also provides methods for producing nucleic acid sizing ladders from these nucleic acid molecules, ladders produced by such methods, and methods for estimating the size and mass of nucleic acid molecules by comparison to these nucleic acid sizing ladders.

P:\USERS\BRIAND\0942\4340001\a183-07.wpd